

In The Claims:

Please amend claims 1 – 6, 8, 11 – 13, 15, 16, 27, 31, 32 and 43 – 46 as follows:

1 (currently amended). A cylinder designed to retain a structural framework material, composite material, or ceramic material for an implant system for placement in the mouth comprising:

a substantially cylindrical body; and

one or more shelves disposed on a surface of the substantially cylindrical body,
wherein the one or more shelves comprise one or more grooves having at least two sides.

2 (currently amended). The cylinder of claim 1 wherein the one or more shelves comprise one or more horizontally extending ~~shelves~~grooves, one or more vertically extending ~~shelves~~grooves, or a combination thereof.

3 (currently amended). The cylinder of claim 2 wherein the horizontally extending ~~shelves~~grooves are located on facial and lingual surfaces of the body and the vertically extending ~~shelves~~grooves are located on proximal surfaces of the body.

4 (currently amended). The cylinder of claim 1 further comprising an opening extending axially through the body.

5 (currently amended). A framework for an implant system comprising:
one or more cylinders, wherein the cylinders each comprise a substantially cylindrical body and one or more shelves disposed on a surface of the substantially cylindrical body, wherein the one or more shelves comprise one or more grooves having at least two sides; and

fiber reinforced composite material retained on the cylinders.

6 (currently amended). The framework of claim 5 wherein the one or more shelves comprise one or more horizontally extending ~~shelves~~grooves, one or more vertically extending ~~shelves~~grooves, or a combination thereof.

7 (original). The framework of claim 5 wherein the one or more cylinders comprise a series of cylinders aligned in a curved line.

8 (currently amended). The framework of claim 5 wherein the fiber reinforced composite material is disposed in and between the vertically extending ~~shelves~~grooves.

9 (original). The framework of claim 5 wherein the fiber reinforced composite material is in the shape of bars.

10 (original). The framework of claim 5 wherein the fiber reinforced composite material is wrapped around the one or more cylinders.

11 (currently amended). The framework of claim 6 wherein the fiber reinforced composite material is disposed in and between the vertically extending ~~shelves~~grooves and is wrapped around the one or more cylinders.

12 (currently amended). An implant system for placement in the mouth comprising:

one or more cylinders designed to retain a structural framework material, composite material, or ceramic material, comprising a substantially cylindrical body and one or more shelves disposed on a surface of the substantially cylindrical body, wherein the one or more shelves comprise one or more grooves having at least two sides.

13 (currently amended). An implant system comprising:

one or more abutments for connection to implants;

one or more cylinders for connection to the one or more abutments wherein each cylinder comprises a substantially cylindrical body, one or more horizontally extending ~~shelves~~grooves having at least two sides, wherein the horizontally extending grooves are disposed on the surface of the cylindrical body, and one or more vertically extending

~~shelves~~grooves having at least two sides, wherein the vertically extending grooves are disposed on the surface of the cylindrical body; and

fiber reinforced composite material retained on the cylinders.

14 (original). The implant system of claim 13 further comprising implants.

15 (currently amended). The implant system of claim 13 wherein the fiber reinforced composite material is disposed in and between the vertically extending ~~shelves~~grooves and is wrapped around the one or more cylinders.

16 (currently amended). An implant system comprising:

one or more abutments for connection to implants;

one or more cylinders for connection to the abutments wherein each cylinder comprises a substantially cylindrical body, one or more horizontally extending ~~shelves~~grooves having at least two sides, wherein the horizontally extending grooves are disposed on the surface of the cylindrical body, and one or more vertically extending ~~shelves~~grooves having at least two sides, wherein the vertically extending grooves are disposed on the surface of the cylindrical body; and

a structural material disposed on the cylinders.

17 (original). The implant system of claim 16 further comprising implants.

18 (original). The implant system of claim 16 wherein the structural material comprises fiber-reinforced composite material.

19 (original). The cylinder of claim 1 fabricated of a material selected from plastic, ceramic, polymeric material, and mixtures thereof.

20 (original). The framework of claim 5 wherein the fiber reinforced composite material comprises a polymeric matrix and fibers dispersed in the polymeric matrix.

21 (original). The framework of claim 20 wherein the fiber-reinforced composite material further comprises a filler material.

22 (original). The framework of claim 20 wherein the polymeric matrix is selected from the group of polyamides, polyesters, polyolefins, polyimides, polyacrylates, polyurethanes, vinyl esters, nylon, epoxy-based materials, styrene, styrene acrylonitrile, ABS polymers, polysulfones, polyacetals, polycarbonates, polyphenylene sulfides and mixtures thereof.

23 (original). The framework of claim 20 wherein the fibers are fabricated from materials selected from glass, carbon, graphite, polyaramid, polyethylene and mixtures thereof.

24 (original). The framework of claim 21 wherein the filler material is selected from silica, silicate glass, quartz, barium silicate, strontium silicate, barium borosilicate, strontium borosilicate, borosilicate, lithium silicate, amorphous silica, ammoniated or deammoniated calcium phosphate, alumina, zirconia, tin oxide, titania poly(methacrylate) and mixtures thereof.

25 (original). A prosthesis comprising the implant system of claim 13.

26 (original). A prosthesis comprising the implant system of claim 16.

27 (currently amended). A method of making an implant system comprising:
placing a series of cylinders onto a cast wherein each cylinder comprises a substantially cylindrical body, one or more horizontally extending ~~shelves~~grooves having at least two sides, wherein the horizontally extending grooves are disposed on the surface of the cylindrical body, and one or more vertically extending ~~shelves~~grooves having at least two sides, wherein the vertically extending grooves are disposed on the surface of the cylindrical body; and

building a structural framework on the series of cylinders.

28 (original). The method of claim 27 wherein the structural framework comprises fiber reinforced composite material.

29 (original). The method of claim 27 further comprising building a prosthesis on the framework.

30 (original). The method of claim 29 further comprising inserting the implant system into a patient's mouth.

31 (currently amended). An implant system comprising:
one or more abutments for connection to implants;
one or more cylinders for connection to the one or more abutments wherein each cylinder comprises a substantially cylindrical body and one or more ~~shelves~~grooves having at least two sides, wherein the grooves are disposed on a surface of the substantially cylindrical body; and
fiber reinforced composite material retained on the cylinders.

32 (currently amended). An implant system comprising:
one or more abutments for connection to implants;
one or more cylinders for connection to the abutments wherein each cylinder comprises a substantially cylindrical body and one or more ~~shelves~~grooves having at least two sides, wherein the grooves are disposed on a surface of the substantially cylindrical body; and
a structural material disposed on the cylinders.

33 (withdrawn). An abutment for an implant system comprising:
a longitudinally extending upper end;
a collar connected to the upper end; and
a longitudinally extending lower end connected to the collar, wherein the upper end comprises one or more retaining holes.

34 (withdrawn). The abutment of claim 33 wherein the lower end comprises threading.

35 (withdrawn). An implant system comprising one or more abutments of claim 33.

36 (withdrawn). The implant system of claim 35 wherein polymeric material is disposed on the upper end of the abutment.

37(withdrawn). The implant system of claim 36 wherein a crown is disposed on the polymeric material.

38 (withdrawn). An abutment for an implant system comprising:
a substantially cylindrical lower end; and
a substantially cylindrical upper end having a plurality of beads thereon.

39 (withdrawn). The abutment of claim 38 comprising a bore therethrough.

40 (withdrawn). An implant system comprising one or more abutments of claim 38.

41 (withdrawn). The implant system of claim 40 wherein polymeric material is disposed on the upper end of the abutment.

42 (withdrawn). The implant system of claim 36 wherein a crown is disposed on the polymeric material.

43 (currently amended). A cylinder designed to retain a structural framework material, composite material, or ceramic material for an implant system for placement in the mouth comprising:

a substantially cylindrical body;
one or more ~~shelves~~grooves having at least two sides, wherein the grooves are
disposed on a surface of the substantially cylindrical body; and
a cantilever extending from the cylindrical body.

44 (currently amended). A cylinder designed to retain a structural framework material, composite material, or ceramic material for an implant system for placement in the mouth comprising:

a substantially cylindrical body;
one or more ~~shelves~~grooves having at least two sides, wherein the grooves are
disposed on a surface of the substantially cylindrical body; and
a series of nodules, holes or beads disposed on a surface of the cylindrical body.

45 (currently amended). A kit for an implant system for placement in the mouth comprising:

one or more cylinders designed to retain a structural framework material, composite material, or ceramic material, wherein the cylinders comprise a substantially cylindrical body; and one or more ~~shelves~~grooves having at least two sides, wherein the grooves are disposed on a surface of the substantially cylindrical body.

46 (currently amended). A kit for an implant system for placement in the mouth comprising:

composite material; and
one or more cylinders designed to retain a structural framework material, composite material, or ceramic material, wherein the cylinders comprise a substantially cylindrical body; and one or more ~~shelves~~grooves having at least two sides, wherein the grooves are disposed on a surface of the substantially cylindrical body.

47 (original). The kit of claim 45 further including abutments, implants, and composite material.

48 (original). The kit of claim 47 further including bonding resin and screws.